

Heriscope.

a.—ANATOMY AND PHYSIOLOGY OF THE NERVOUS SYSTEM.

VASCULAR SUPPLY OF THE SPINAL CORD.—Dr. James Ross, in *Brain*, Vol. III., No. 1, maps out the distribution of blood-vessels of the cord from a series of fortunate sections:

The anterior median artery divides into two main trunks, each entering the grey anterior horns; each trunk subdivides into three branches, the anterior branch of which curves forward and is distributed to the anterior and internal portion of the grey substance, the median goes to the lateral portion of the anterior horn, while the posterior goes to the posterior horn. The central artery gives off also three branches, going to the anterior, lateral and posterior grey matter. The posterior spinal artery divides into a variable number of branches distributed to the posterior horns. In addition to the vessels described a large number pass from the pia mater into the substance of the cord, and some are very large. Two of these run by the anterior roots of the nerves. The internal anterior root artery joins the anterior branches of the first subdivision of the artery of the anterior median fissure and of the central artery. The external anterior root artery divides into two branches in the grey substance.

Other more or less constant vessels are found as follows:

One passing from the lateral aspect of the cord dividing into two branches, one of which passes in front and the other behind the postero-lateral group of cells, and this vessel may be called the median lateral artery.

An internal posterior artery runs from the pia mater, passes between the columns of Goll and the posterior root zone, and after passing through about two-thirds of the depth of the posterior column it curves outward to reach the posterior grey horn.

A posterior commissure artery winds backward along the internal edge of the posterior horn. In all inflammatory diseases the tissues in the vicinity of the vessels will be more liable than the remote portion to be inundated by effusion; hence, the lines of the distinction of the vessels may be said to form lines of least resistance to disease.

c.

CORPORA QUADRIGEMINA.—Dr. Spitzka, in the *Medical Record* for March 18, 1880, gives some new features in the anatomy of the corpora quadrigemina. He says the older anatomists, observing the similarity in external appearance between the anterior and posterior pairs of the corpora quadrigemina, naturally considered all the four tubercles to be analogous in their

der Irren, *Arch. f. Psych.*, x., 2.—MONAKOW, Zur pathologischen Anatomie der Bleiſſhmung und der saturnine Encephalopathie, *Ibid.*—TAKACZ, Untersuchungen ueber die Verspätung der Empfindungsleitung, *Ibid.*—RACINE, Ein Fall von acuter (primärer) spontaner Rückenmarkserweichung, *Ibid.*

b.—PATHOLOGY OF THE NERVOUS SYSTEM AND PATHOLOGICAL ANATOMY.

HEAD SYMPTOMS WITH TRANSITORY PARALYSIS IN CHILDREN, FOLLOWED BY PERMANENT DEAFNESS.—Dr. A. Seeligmüller, *Centralbl. f. Nervenheilkunde*, March, gives an account of two cases of children, aged 3 and 4 years respectively, who were suddenly seized with high fever, delirium, headache, etc., and who, after the subsidence of the more acute symptoms, were found more or less paraplegic and deaf. The motor symptoms in one case were as follows: The child could move his limbs in all directions with considerable force, the faradic and sensory reactions were apparently normal, but he could neither walk nor stand. The patellar reflex was lacking, but tickling the sole of the foot produced the usual contractions. Sensibility was apparently normal; nothing abnormal in the spinal cord, except an apparent sensitiveness of the dorsal vertebræ. In a few months power of the limbs was completely restored, but deafness was persistent and complete. The other case, when seen a month after the first attack, could walk with support, but was unsteady, stood with his limbs wide apart, though it had not the appearance of vertigo, and his gait was about the same with the eyes closed or open. Electric reaction, reflexes, and sensation were normal; the bodily functions all right. A few days later the motor symptoms had much improved. The deafness was complete.

Similar histories have been given by Voltolini, Toynbee, and Von Tröltsch. The latter author had attributed it to a localized lesion in the fourth ventricle, but Seeligmüller rejects this explanation, since in both of his cases he found no sugar in the urine, and there was no increase in its quantity. The exact pathology of the condition cannot be determined until a fatal case affords an autopsy, an event that has not as yet occurred.

THE NERVOUS SYMPTOMS OF DYSPEPSIA.—At the session of the Société de Biologie, April 3, M. Leven offered a communication, of which the following abstract is reported in the *Gaz. des Hôpitaux*, No. 40:

Physiological experiment has demonstrated that relations exist between the brain and stomach. Lesions in the thalami, the crura, the upper part of the cord, or section of the trigeminus within the cranium, are sufficient to cause certain disorders of the stomach. Schiff rightly concludes that this cerebral influence is transmitted *via* the pneumogastrics.

M. Leven has been able to clinically observe the action of dyspepsia on the cord and brain. The nervous disorders due to dyspepsia are of two kinds: Disorders of sensibility and vaso-motor troubles.